


Engineer: Bruce Page	Date: 9/27/05	<div style="text-align: center;">    <b>JPS Communications</b>   5800 Departure Drive, Raleigh, NC 27616 </div>			
Drawn: Bruce Page	Date: 9/27/05				
Approved: CTS	Date: 9/28/05	Title: ACU RADIO APPLICATION NOTES			
Issued/ Revised	Date: 9/30/05	Size: A	Dwg. #: <b>5961-271305-APP</b>	Rev: <b>A</b>	Sheet: 1                      Of    1

**APPLIES TO:**                      Kenwood TK-7180 Mobile (Speaker-Microphone)  
Kenwood TK-8180 Mobile (Speaker-Microphone)  
Kenwood TK-7160 Mobile (Speaker-Microphone)  
Kenwood TK-8160 Mobile (Speaker-Microphone)

**RADIO MODIFICATIONS:**    None required.

**RADIO PROGRAMMING:**

1.            Mobile radios should normally be programmed for low transmit power.

**RADIO CONTROLS:**

1.            Adjust the Volume Control until the yellow "SIGNAL" indicator on the associated DSP Module flashes with receive audio. This should be at or about 16 for half full volume level.

**CABLING:**

Standard ACU-1000 and ACU-T Interface cables are made up of a 2 foot TRP Radio Tray Interface cable and the appropriate 13-foot Extension cable.

ACU-1000 Interface Cable	JPS P/N 5961-291305	(5961-271305 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-281305	(5961-271305 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271305	
Radio RF Connector Type		

**DSP-1 JUMPERS:**

JP1	Low Impedance *
JP2	Balanced *

**DSP PROGRAMMING:**

RX Level	3*	0dBm*
TX Level	6*	0dBm*
Squelch Type	VOX*	
COR Polarity	Active Low*	
High Frequency Equalizer	4*	Flat*
RX Audio Delay	2*	100 ms*
TX Audio Delay (Radio Type)	0*	No Delay*
Noise Reduction Value	0*	Off*
VOX/VMR Threshold	1*	Med1*
VOX/VMR Hang Time	3*	775 ms*
COR Inhibit After PTT	1*	100 ms*
All Others	As needed	

(\* Indicates Default Value)

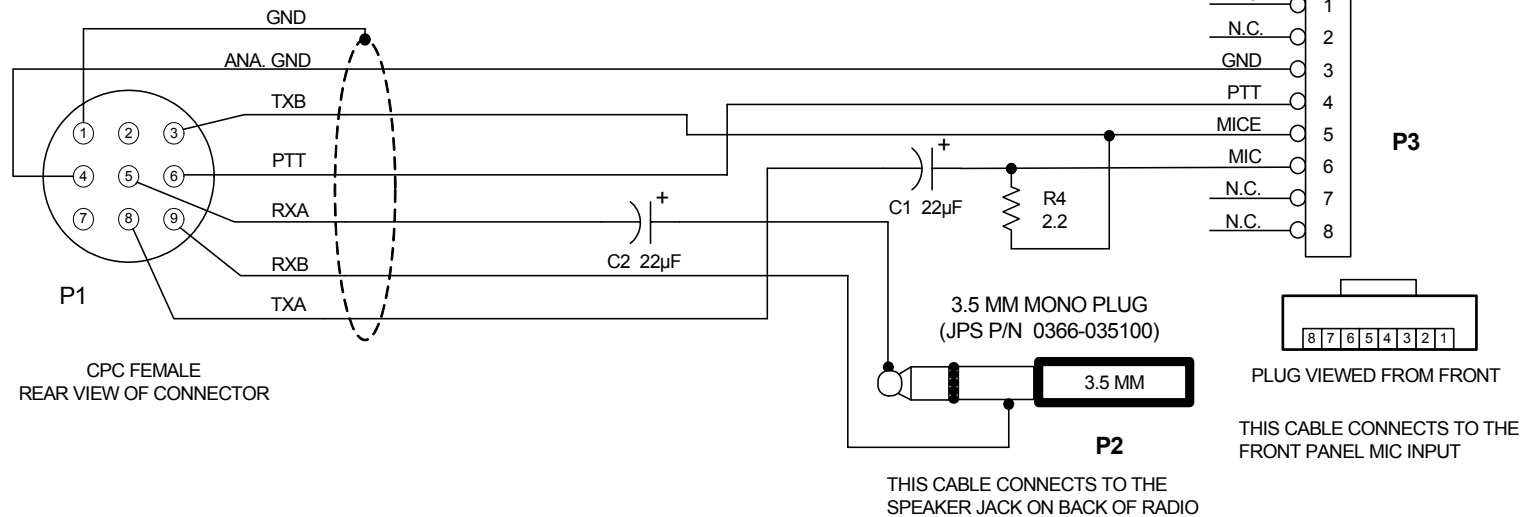
**NOTES:**

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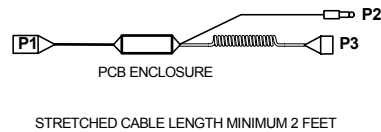
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USE MOLDED CABLE  
(JPS P/N 5961-261003-00)



## CABLE DETAIL



## COMPONENT PCB (JPS P/N 5961-271000)

C1 JPS P/N 0321-220250  
C2 JPS P/N 0321-220250  
R4 JPS P/N 1820-022000  
JU2

NOTE: SHIELD DRAIN CONNECTED TO PIN 1 OF P1 ONLY.

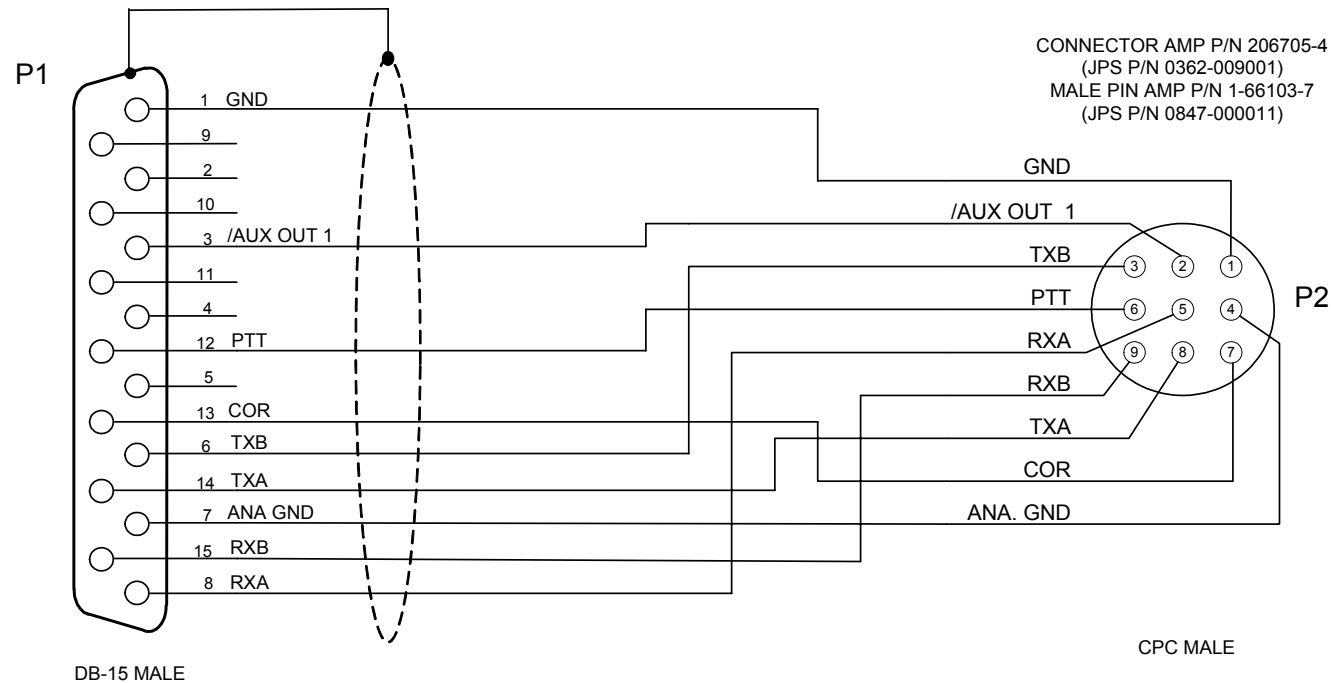
FOR DETAILED CABLE ASSEMBLY INSTRUCTIONS SEE  
5961-271001-CBL.

USED WITH:  
KENWOOD TK-7180 MOBILE (SPEAKER/MICROPHONE)  
KENWOOD TK-8180 MOBILE (SPEAKER/MICROPHONE)  
KENWOOD TK-7160 MOBILE (SPEAKER/MICROPHONE)  
KENWOOD TK-8160 MOBILE (SPEAKER/MICROPHONE)

Designed By: RBP	<b>Raytheon JPS Communications</b> Raleigh, NC USA		
Drawn By: RBP	Title CABLE, CPC TO KENWOOD SPEAKER / MICROPHONE		
Checked By: CTS	Size A	Document Number <b>5961-271305</b>	Rev A
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- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.  
2) CONNECT SHIELD DRAIN TO SHELL OF P1 ONLY.  
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.  
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

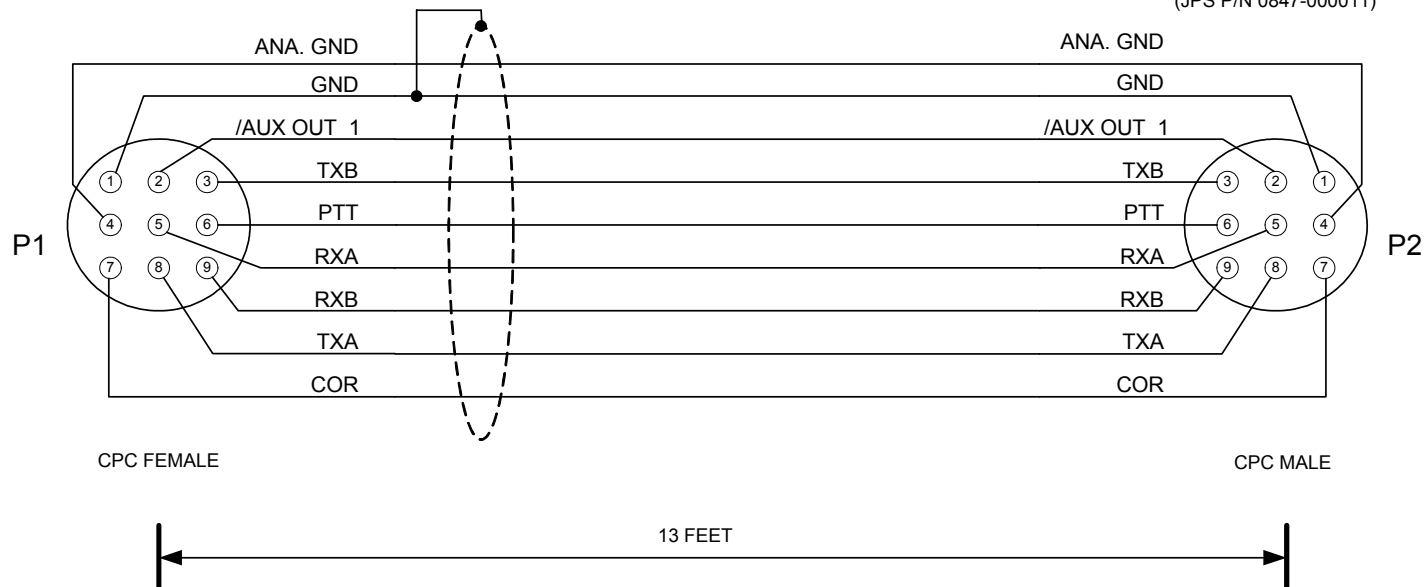
Designed By: JAC	<b>Raytheon JPS Communications</b>		
Drawn By: JAC	Title CABLE, ACU-1000 RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number <b>5961-261002-00</b>	Rev A
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## PURCHASED PART

CONNECTOR AMP P/N 206708-1  
(JPS P/N 0362-005003)  
FEMALE PIN AMP P/N 1-66105-8  
(JPS P/N 0362-005002)

CONNECTOR AMP P/N 206705-4  
(JPS P/N 0362-009001)  
MALE PIN AMP P/N 1-66103-7  
(JPS P/N 0847-000011)



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.  
2) CONNECT SHIELD DRAIN TO PIN 1 OF P1 ONLY.  
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.  
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

Designed By: JAC	<b>Raytheon JPS Communications</b> Raleigh, NC USA		
Drawn By: JAC	Title CABLE, ACU-T RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number <b>5961-281013-00</b>	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	